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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,884	01/20/2004	Munehiro Karasudani	22040-00028-US	1883
30678	7590	08/04/2004	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ LLP			CHOE, HENRY	
SUITE 800				
1990 M STREET NW			ART UNIT	
WASHINGTON, DC 20036-3425			2817	
			PAPER NUMBER	

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/707,884		KARASUDANI, MUNEHIRO	
	<b>Examiner</b>		<b>Art Unit</b>	
	Henry K Choe		2817	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/27/04; 3/8/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Sueyoshi (Fig. 4).

Sueyoshi (Fig. 4) discloses an amplifier circuit comprising a plurality of amplifiers (Q1-Q3) which are constructed in a cascade connection manner, a power source line (B1, B2) which are connected to the plurality of amplifiers (Q1-Q3) and the wherein the power source line (B1, B2) has a first power source line (B1) which is connected to at least the initial-stage amplifier (Q2) from among the plurality of amplifiers (Q1-Q3) and a second power source line (B2) which is commonly connected to the remaining amplifiers (Q3, Q1) except for at least the initial stage amplifier (Q2), and a ground line (-B3, -B4) which is connected to the plurality of amplifiers (Q1-Q3) and a first ground line (-B3) which is connected to at least the initial stage amplifier (Q2) and a second ground line (-B4) which is commonly connected to the remaining amplifiers except for at least the initial stage amplifier (Q2).

Claims 1, 2, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al (Fig. 1).

Regarding claims 1, 5 and 8, Ishikawa et al (Fig. 1) discloses an amplifier circuit comprising a plurality of amplifiers (Tr1, Tr2) which are constructed in a cascade connection manner, a power source line (VDD1, VDD2) which are connected to the plurality of amplifiers (Tr1, Tr2) and the wherein the power source line (VDD1, VDD2) has a first power source line (VDD1) which is connected to at least the initial-stage amplifier (Tr1) from among the plurality of amplifiers (Tr1, Tr2) and a second power source line (VDD2) which is commonly connected to the remaining amplifier (Tr2) except for at least the initial stage amplifier (Tr1), and a ground line (ground) which is connected to the plurality of amplifiers (Tr1, Tr2).

Regarding claim 2, a bypass condenser (Cb4) which is arranged between the second power source line (VDD2) and a ground line (ground).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 7, 9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sueyoshi (Fig. 4).

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Sueyoshi (Fig. 4) discloses all the limitations in the claims except for that the substrates held by the plurality of amplifiers are connected to the ground line and a power source pad connected to the power source lines and a ground pad connected to the ground lines. It would have been well known to use a power source pad connected to the power source lines and a ground pad connected to the ground lines in order to connect the electrical connection between the substrates and power sources. Therefore, it would have been obvious to have add the well known power source pad and ground pad on the circuitry of Sueyoshi (Fig. 4) because such a modification would have provided the advantage benefit of improving the electrical connection between components. Furthermore, the plurality of amplifiers being fabricated on the substrates are well known in the art of means for mounting and connecting electronic devices to form an Integrated Circuit (IC). Therefore, it would have been obvious to have fabricated the plurality of amplifiers on the substrate because such a modification would have considered a mere application of well-known conventional printed circuit board construction.

Claims 4, 7, 9, 10, 12, 13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al (Fig. 1).

Regarding claims 4, 7, 9, 12, 13 and 15-18, Ishikawa et al (Fig. 1) discloses all the limitations in the claims except for that the substrates held by the plurality of amplifiers are connected to the ground line and a power source pad connected to the power source lines and a ground pad connected to the ground lines. It would have been well known to use a power source pad connected to the power source lines and a ground pad connected to the ground lines in order to connect the electrical connection between the substrates and power sources. Therefore, it would have been obvious to have add the well known power source pad and ground pad on the circuitry of Ishikawa et al (Fig. 1) because such a modification would have provided the advantage benefit of improving the electrical connection between components. Furthermore, the plurality of amplifiers being fabricated on the substrates are well known in the art of means for mounting and connecting electronic devices to form an Integrated Circuit (IC). Therefore, it would have been obvious to have fabricated the plurality of amplifiers on the substrate because such a modification would have considered a mere application of well-known conventional printed circuit board construction.

Regarding claim 10, a bypass condenser (Cb4) which is arranged between the second power source line (VDD2) and a ground line (ground).


### **Conclusion**

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent numbers (4,935,705; 4,268,797) are the cascade amplifiers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Choe whose telephone number is (571) 272-1760.

  
**HENRY CHOE**  
**PRIMARY EXAMINER**

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